# Maryland Weekly Influenza Surveillance Activity Report

A summary of influenza surveillance indicators reported to MDH for the week ending December 8, 2018

Prepared by the Division of Infectious Disease Surveillance
Prevention and Health Promotion Administration
Maryland Department of Health

*The data presented in this document are provisional and subject to change as additional reports are received.*

## SUMMARY

During the week ending December 8, 2018 influenza-like illness (ILI) intensity in Maryland was **MINIMAL** and there was **LOCAL** geographic activity. The proportion of outpatient visits for ILI reported by Sentinel Providers decreased. The proportion of outpatient visits for ILI reported by Maryland Emergency Departments increased slightly from last week. The proportion of MRITS respondents reporting ILI increased. Clinical laboratories reported an increase in the proportion of specimens testing positive for influenza. Seventeen specimens tested positive for influenza at the MDH lab. There were 7 influenza-associated hospitalizations. There were no respiratory outbreaks reported to MDH.

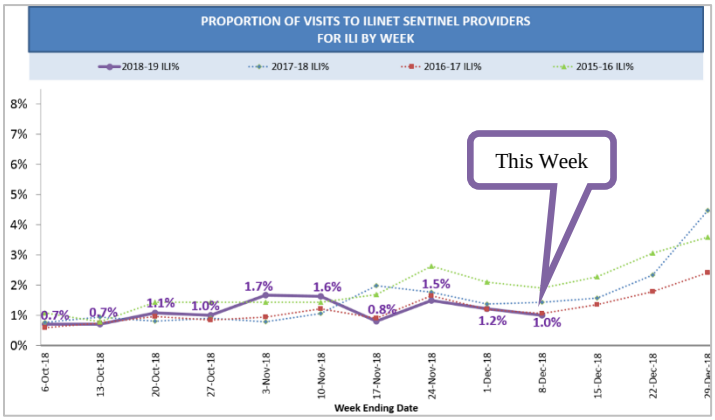
Click here to visit our influenza surveillance web page

| ILI Intensity Levels |
|---|
| ✓ Minimal |
| Low |
| Moderate |
| High |

| Influenza Geographic Activity |
|---|
| No Activity |
| Sporadic |
| ✓ Local |
| Regional |
| Widespread |

## ILINet Sentinel Providers

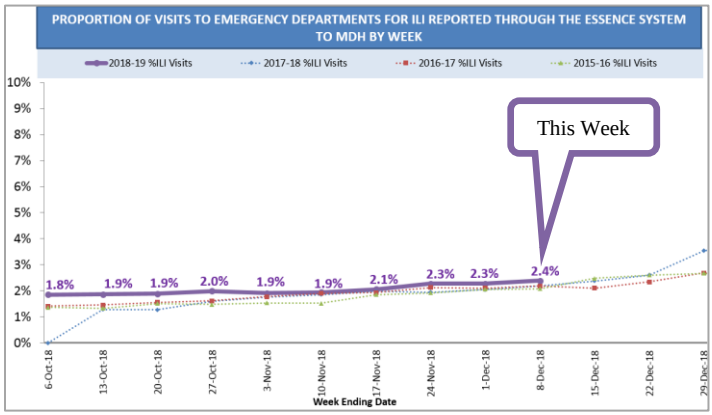
Twenty one providers reported a total of 6,968 visits this week. Of those, 70 (1.0%) were visits for ILI. This is **below** the Maryland baseline of **2.0%**.




| ILI Visits To Sentinel Providers By Age Group | This Week Number (%) | Last Week Number (%) | Season Number (%) |
|---|---|---|---|
| Age 0-4 | 25 (36%) | 21 (27%) | 218 (28%) |
| Age 5-24 | 23 (33%) | 34 (43%) | 317 (41%) |
| Age 25-49 | 8 (11%) | 9 (11%) | 125 (16%) |
| Age 50-64 | 14 (20%) | 8 (10%) | 73 (9%) |
| Age ≥ 65 | 0 (%) | 7 (9%) | 45 (6%) |
| Total | 70 (100%) | 79 (100%) | 778 (100%) |

## Visits to Emergency Departments for ILI

Emergency Departments in Maryland reported a total of 54,923 visits this week through the ESSENCE surveillance system. Of those, 1,313 (2.4%) were visits for ILI.




| ILI Visits To Emergency Departments By Age Group | This Week Number (%) | Last Week Number (%) | Season Number (%) |
|---|---|---|---|
| Age 0-4 | 335 (26%) | 263 (22%) | 2,764 (24%) |
| Age 5-24 | 401 (31%) | 388 (33%) | 3,768 (33%) |
| Age 25-49 | 332 (25%) | 333 (28%) | 3,061 (27%) |
| Age 50-64 | 143 (11%) | 134 (11%) | 1,156 (10%) |
| Age ≥ 65 | 102 (8%) | 71 (6%) | 690 (6%) |
| Total | 1,313 (100%) | 1,189 (100%) | 11,439 (100%) |

**Neighboring states' influenza information:**

| | |
|---|---|
| Delaware | http://dhss.delaware.gov/dph/epi/influenzahome.html |
| District of Columbia | http://doh.dc.gov/service/influenza |
| Pennsylvania | http://www.health.pa.gov/My%20Health/Diseases%20and%20Conditions/I-L/Pages/Influenza.aspx#.V-LtaPkrJD8 |
| Virginia | http://www.vdh.virginia.gov/epidemiology/influenza-flu-in-virginia/influenza-surveillance/ |
| West Virginia | http://dhhr.wv.gov/oeps/disease/flu/Pages/fluSurveillance.aspx |

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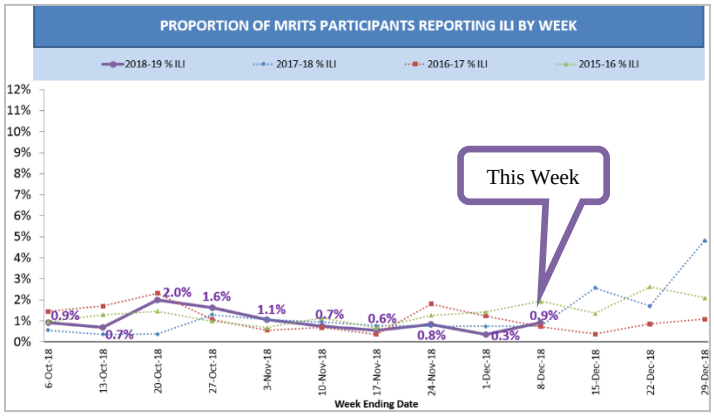
## Community-based Influenza Surveillance (MRITS)

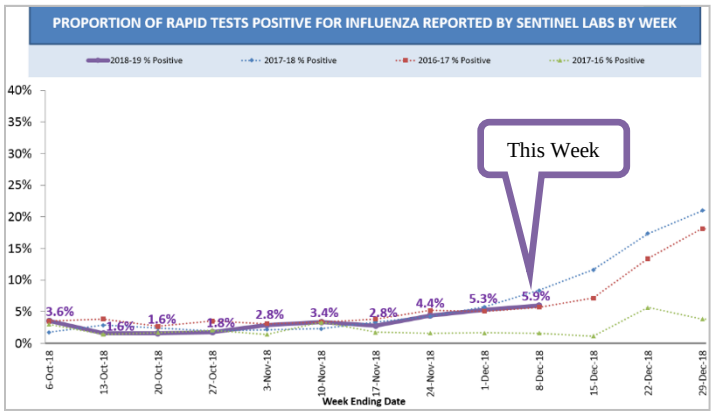
MRITS is the Maryland Resident Influenza Tracking System, a weekly survey for influenza-like illness (ILI). A total of 552 residents responded to the MRITS survey this week. Of those, 5 (0.9%) reported having ILI and missing 12 cumulative day of regular daily activities.



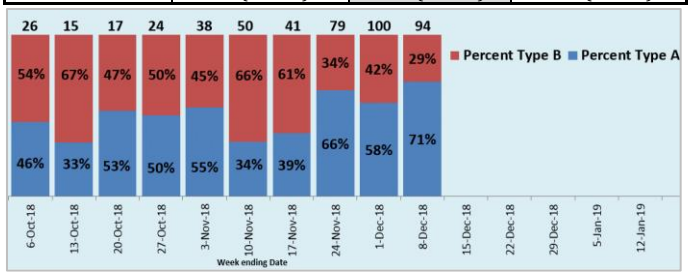

| MRITS Respondents Reporting ILI By Age Group | This Week Number (%) | Last Week Number (%) | Season Number (%) |
|---|---|---|---|
| Age 0-4 | 1 (20%) | 1 (50%) | 6 (11%) |
| Age 5-24 | 1 (20%) | 1 (50%) | 12 (23%) |
| Age 25-49 | 3 (60%) | 0 (0%) | 15 (28%) |
| Age 50-64 | 0 (0%) | 0 (0%) | 12 (23%) |
| Age ≥ 65 | 0 (0%) | 0 (0%) | 8 (15%) |
| Total | 5 (100%) | 2 (100%) | 53 (100%) |

## Clinical Laboratory Influenza Testing

There were 48 clinical laboratories reporting 1,580 influenza diagnostic tests, mostly rapid influenza diagnostic tests (RIDTs). Of those, 94 (5.9%) were positive for influenza. Of those testing positive, 67 (71%) were influenza Type A and 27 (29%) were influenza Type B. The reliability of RIDTs depends largely on the conditions under which they are used. False-positive (and true-negative) results are more likely to occur when the disease prevalence in the community is low, which is generally at the beginning and end of the influenza season and during the summer.

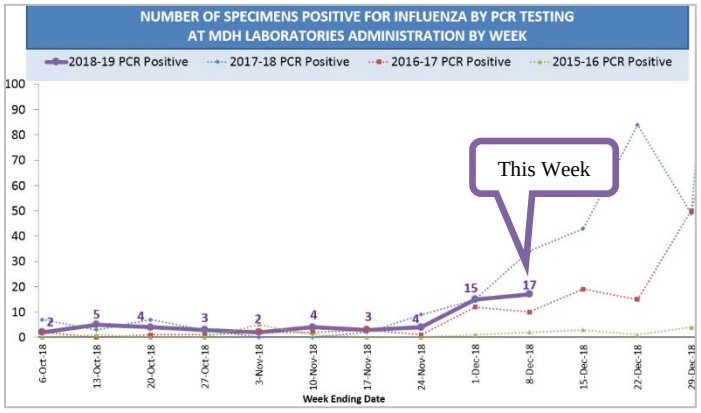



| Positive Rapid Flu Tests by Type | This Week Number (%) | Last Week Number (%) | Season Number (%) |
|---|---|---|---|
| Type A | 67 (71%) | 58 (58%) | 269 (56%) |
| Type B | 27 (29%) | 42 (42%) | 215 (44%) |
| Total | 94 (100%) | 100 (100%) | 484 (100%) |




## State Laboratories Administration Influenza Testing

The MDH Laboratories Administration performed a total of 92 PCR tests for influenza and 17 (18.5%) were positive for influenza. Of those testing positive, 11 (65%) were positive for Type A (H1), 4 (24%) were positive for Type A (H3), 1 (6%) was positive for Type B (Victoria), and 1 (6%) was positive for Type B (Yamagata). PCR testing is more reliable than RIDT. The MDH testing identifies subtypes of influenza A and lineages of influenza B, information that is not available from the RIDT results. The table below summarizes results by type, subtype, and lineage.




| Positive PCR Tests by Type (Subtype) | This Week Number (%) | Last Week Number (%) | Season Number (%) |
|---|---|---|---|
| Type A (H1) | 11 (65%) | 9 (60%) | 33 (56%) |
| Type A (H3) | 4 (24%) | 4 (27%) | 11 (19%) |
| Type B (Victoria) | 1 (6%) | 1 (7%) | 12 (20%) |
| Type B (Yamagata) | 1 (6%) | 1 (7%) | 3 (5%) |
| Dual Type A (H1/H3) | 0 (0%) | 0 (0%) | 0 (0%) |
| Total | 17 (100%) | 15 (100%) | 59 (100%) |

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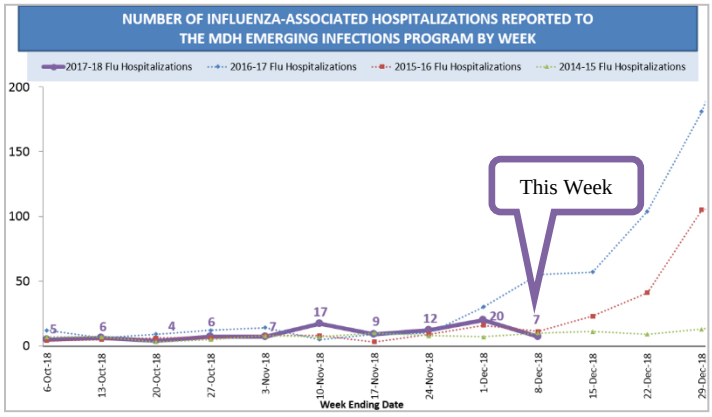
## Influenza-associated Hospitalizations

A total of 7 influenza-associated hospitalizations were reported this week. (A person with an overnight hospital stay along with a positive influenza test of any kind, e.g., RIDT or PCR, is considered an "influenza-associated hospitalization" for purposes of influenza surveillance.) This surveillance is conducted as a component of the Maryland Emerging Infections Program.

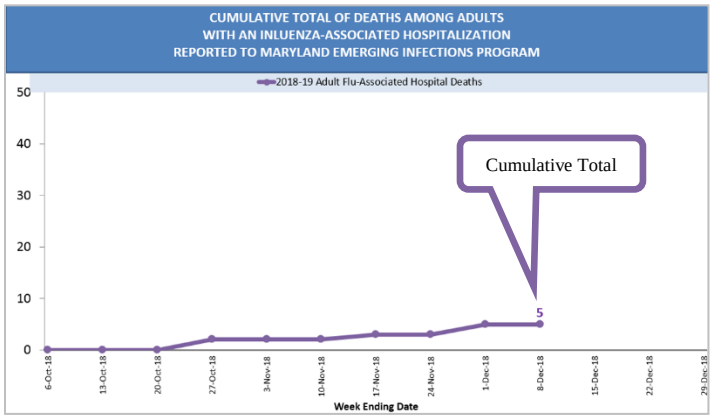



| Influenza-Associated Hospitalizations by Age Group | This Week Number (%) | Last Week Number (%) | Season Number (%) |
|---|---|---|---|
| Age 0-4 | 1 (14%) | 4 (20%) | 20 (21%) |
| Age 5-17 | 0 (0%) | 0 (0%) | 4 (4%) |
| Age 18-24 | 0 (0%) | 2 (10%) | 4 (4%) |
| Age 25-49 | 1 (14%) | 4 (20%) | 21 (22%) |
| Age 50-64 | 1 (14%) | 3 (15%) | 14 (15%) |
| Age ≥ 65 | 4 (57%) | 7 (35%) | 31 (33%) |
| Total | 7 (100%) | 20 (100%) | 94 (100%) |

## Influenza-associated Deaths

An influenza-associated death is one with a clinically compatible illness and a positive influenza test of any kind.

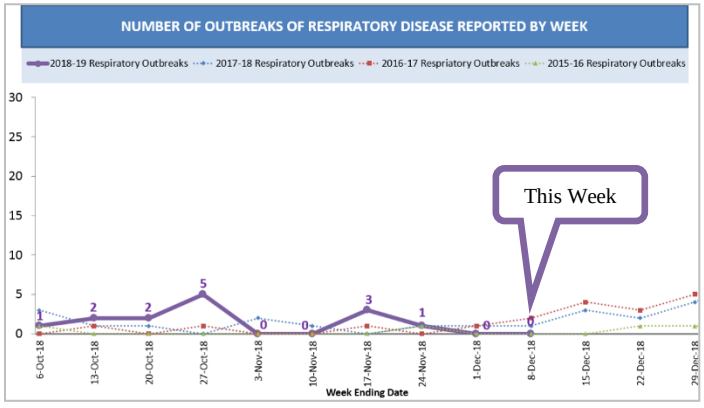
**Pediatric Deaths:** No pediatric (< 18 years of age) deaths were reported this week.
Influenza-associated pediatric mortality is a reportable condition in Maryland. Pediatric deaths are tracked without regard to hospitalization.
**Adult Deaths Among Hospitalized Patients:** A cumulative season total of 5 deaths have been reported among adults admitted to Maryland hospitals.
Influenza-associated adult mortality is ***not*** a reportable condition in Maryland. However, surveillance for mortality in hospitalized adults is conducted as a component of the Maryland Emerging Infections Program.




| Influenza-Associated Deaths | Cumulative Season Total |
|---|---|
| Pediatric Deaths (Age < 18) | 0 |
| Adult Deaths (in hospitalized cases) | 5 |

## Outbreaks of Respiratory Disease

There were no respiratory outbreaks reported to MDH this week. (Disease outbreaks of any kind are reportable in Maryland. Respiratory outbreaks may be reclassified once a causative agent is detected, e.g., from ILI to influenza.)




| Respiratory Outbreaks by Type | This Week Number (%) | Last Week Number (%) | Season Number (%) |
|---|---|---|---|
| Influenza | 0 (0%) | 0 (0%) | 0 (0%) |
| Influenza-like Illness | 0 (0%) | 0 (0%) | 5 (36%) |
| Pneumonia | 0 (0%) | 0 (0%) | 9 (64%) |
| Other Respiratory | 0 (0%) | 0 (0%) | 0 (0%) |
| Total | 0 (0%) | 0 (100%) | 14 (100%) |

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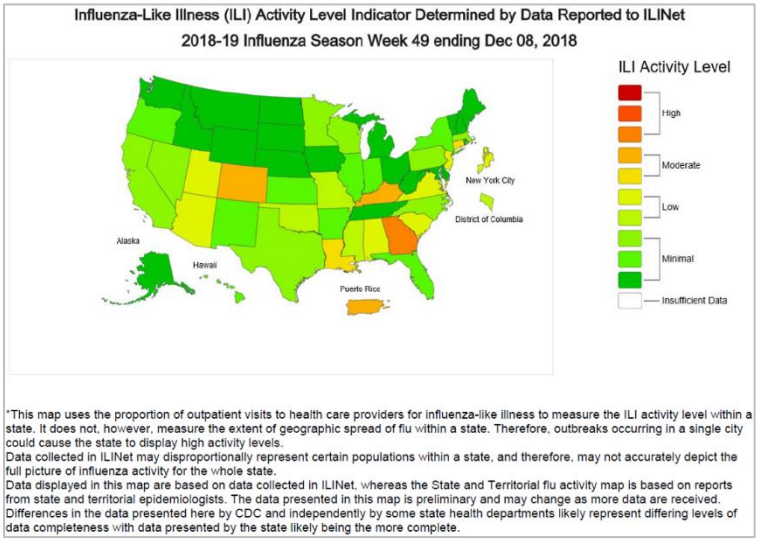
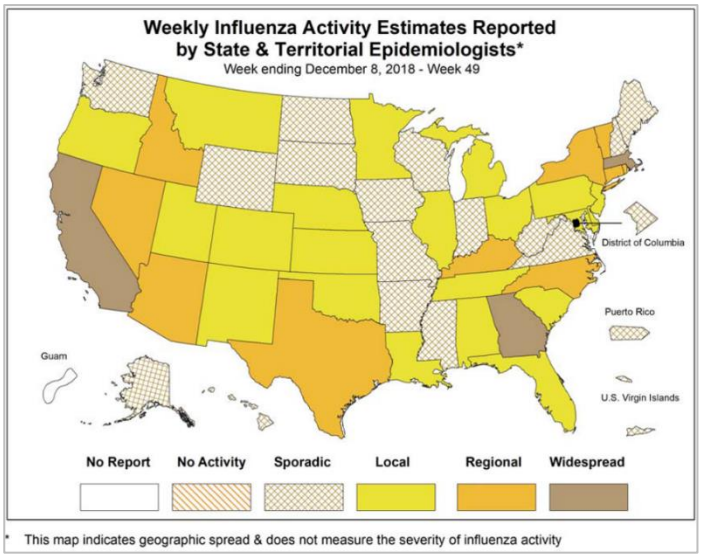
## National Influenza Surveillance (CDC)

Influenza activity in the United States remained slightly elevated. Influenza A(H1N1)pdm09, influenza A(H3N2), and influenza B viruses continue to co-circulate, with influenza A(H1N1)pdm09 viruses reported most commonly by public health laboratories since September 30, 2018.

- **Viral Surveillance:** Influenza A viruses have predominated in the United States since the beginning of October. The percentage of respiratory specimens testing positive for influenza in clinical laboratories remains low.
- **Influenza-like Illness Surveillance:** The proportion of outpatient visits for influenza-like illness (ILI) remained at 2.2%, which is at the national baseline of 2.2%. Five of 10 regions reported ILI at or above their region-specific baseline level.
- **Geographic Spread of Influenza:** The geographic spread of influenza in three states was reported as widespread; 10 states reported regional activity; 21 states reported local activity; the District of Columbia, Puerto Rico, the U.S. Virgin Islands and 16 states reported sporadic activity; and Guam did not report.
- **Pneumonia and Influenza Mortality:** The proportion of deaths attributed to pneumonia and influenza (P&I) was below the system-specific epidemic threshold in the National Center for Health Statistics (NCHS) Mortality Surveillance System.
- **Influenza-associated Pediatric Deaths:** One influenza-associated pediatric death was reported to CDC for week 49.
- **Outpatient Illness Surveillance:** Nationwide during week 49, 2.2% of patient visits reported through the U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet) were due to influenza-like illness (ILI). This percentage is at the national baseline of 2.2%. (ILI is defined as fever (*temperature of 100°F [37.8°C] or greater) and cough and/or sore throat*.)




### Where to get an influenza vaccination

Interested in getting a flu vaccine for the 2018-19 influenza season? Go to https://phpa.health.maryland.gov/influenza/Pages/getvaccinated.aspx and click on your county/city of residence. You will be redirected to your local health department website for local information on where to get your flu vaccine.